Project File # CP19-017

1510-1540 Parkmoor Ave., San Jose, CA 95128

815032 - HWY 280/MERIDIAN

Alternative Site Analysis

Existing Site & Coverage

Crown Castle is the owner and operator of this existing monopole . Currently the existing facility has AT&T and Verizon as collocated tenants. The site was installed back in the early 1990's and has been in operation since. This site serves a densely populated residential area and the heavy traffic along the Almaden Expressway.

Wireless Networks and Coverage

Cellular networks are just that, networks. Carriers build sites and link them together to create a network of coverage. These networks become similar, to a living organism as they operate together. That is how the term “cell” was coined, all these site work together like cells in a human body. One depends on the the other. When one site goes down or is adjusted it effects all the sites surrounding it. This site has a very limited area to move if relocation was required. If the new location moves too much in on one direction it will get too close to another site which can create interference while at the same time create a coverage gap in the reverse direction. There are only a few properties that could work but each location would need a new tower to reach the height needed in order to maintain the current coverage.

General Plan Consistency

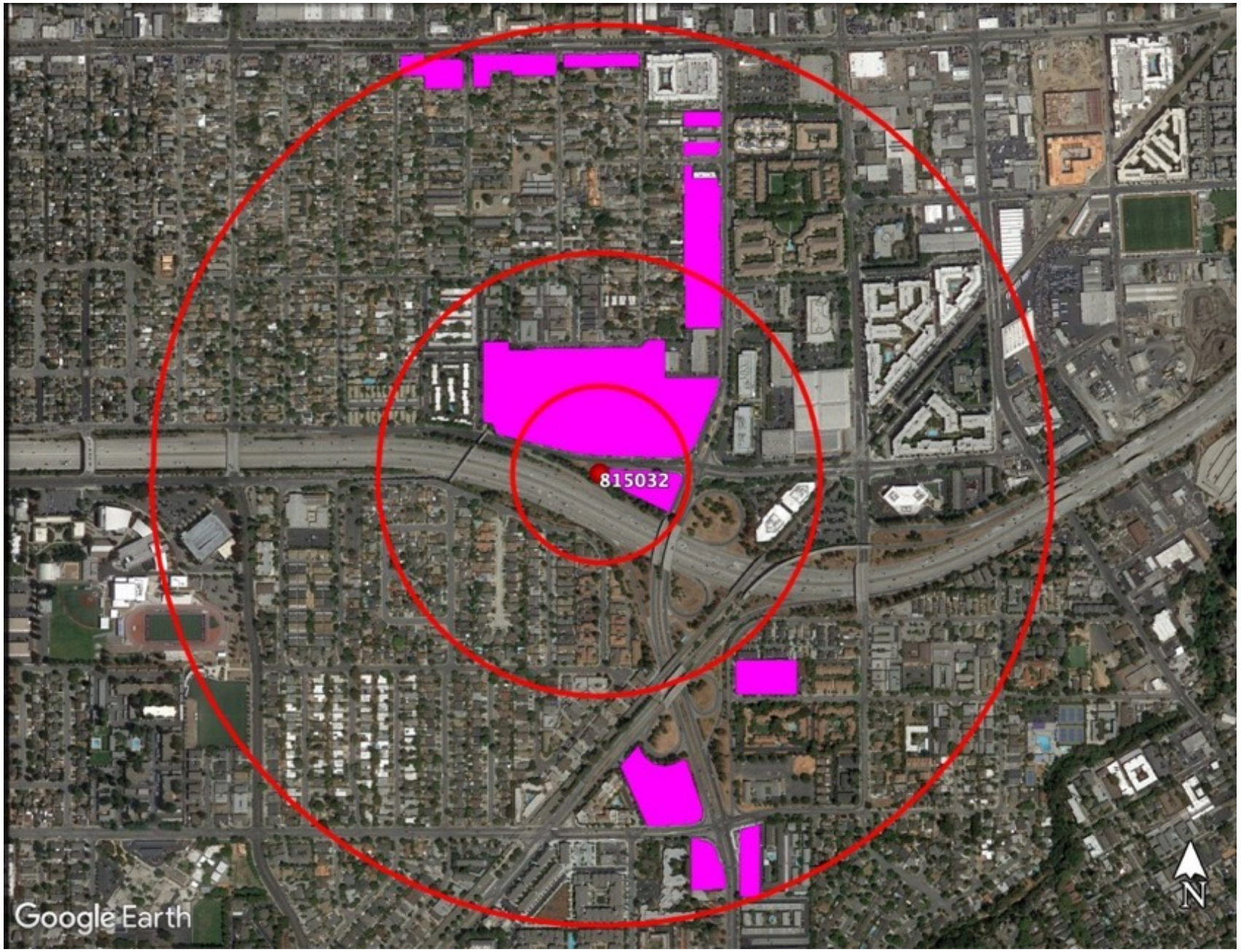
Infrastructure Policy IN-6.1: Work the service provider to ensure access to and availability of a wide range of state-of-the are telecommunication system and services for households, businesses, institutions, and public agencies throughout the city.

The wireless industry is continually evolving. The demand for data increase by 100% every year. The industry is always striving to be able to deliver the bandwidth that is needed as well as 100% continues coverage. The carriers are constantly working on and maintaining their networks. As such, in 2015 Verizon Wireless was obtained approval to upgrade antennas via Development Permit Adjustment AD 15-900. These upgraded antennas allowed for more robust wireless communication for users.

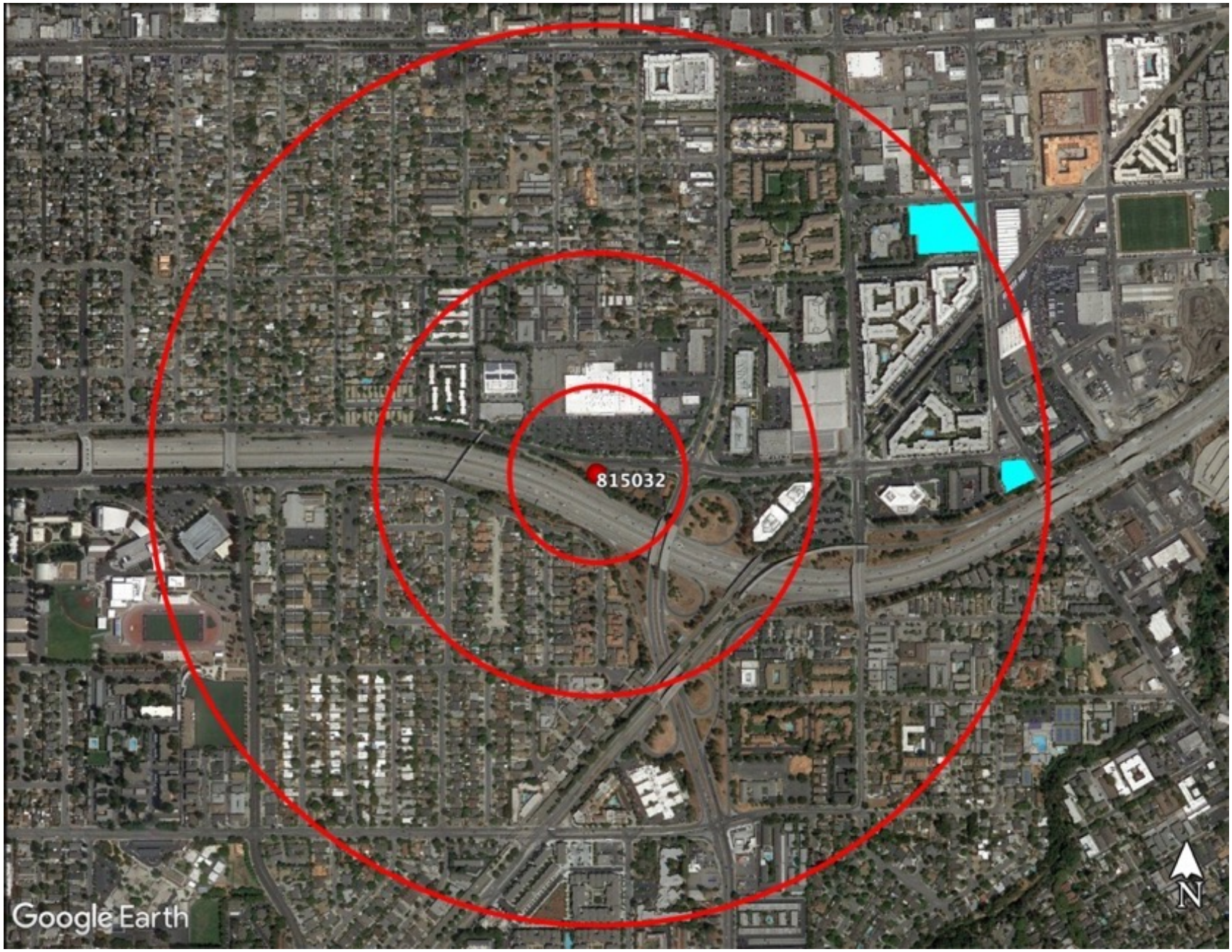
Zoning Designations

Agriculture

Commercial



Heavy Industrial



Industrial Park

Light Industrial

Planned Development

Residential

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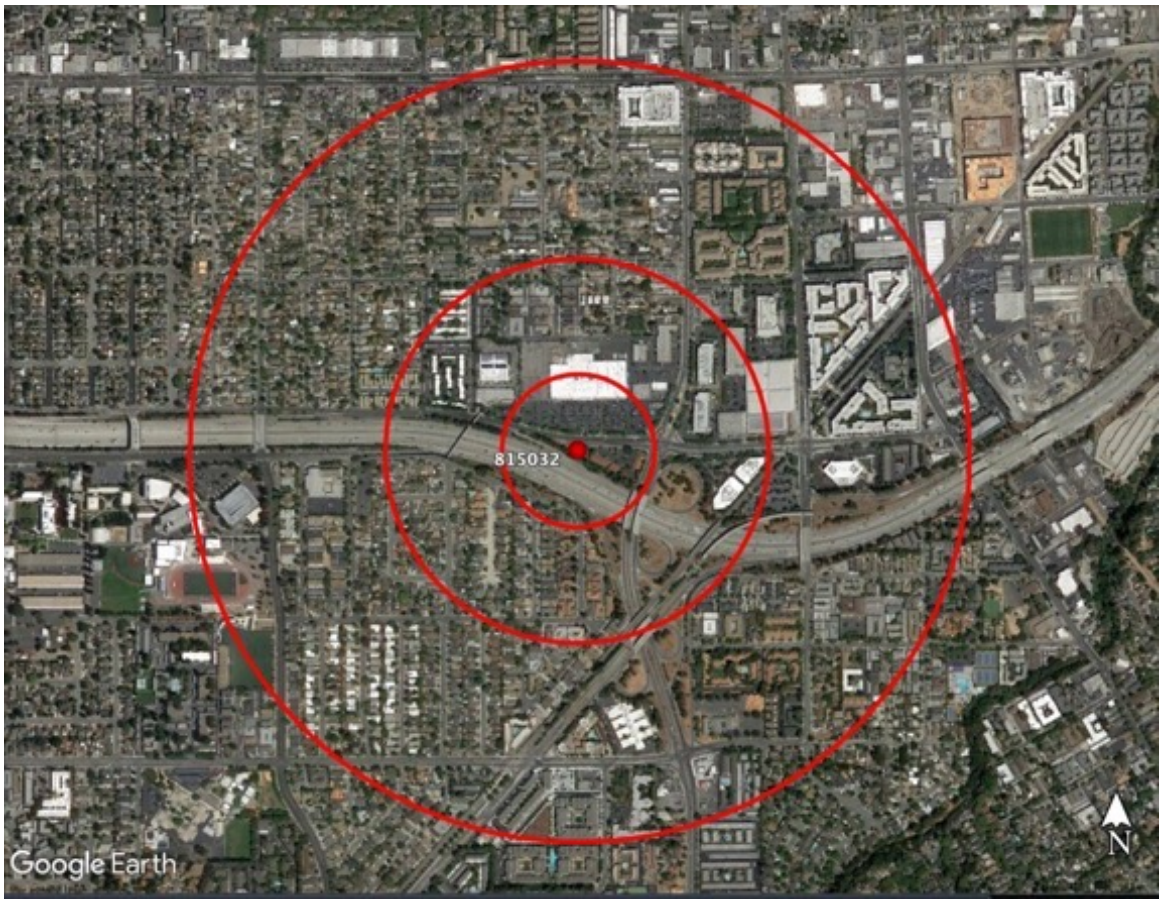
Existing Site Photo, Search Ring, Zoning, and FCC Information

1510-1540 Parkmore Avenue, San Jose, CA 95126

Overview of the target and coverage area. The location of the existing tower is the Red Dot Location.

Potential Relocation Search Rings

The red rings show the distance from the site, 1/10 of a mile, 1/4 of a mile and 1/2 of a mile.

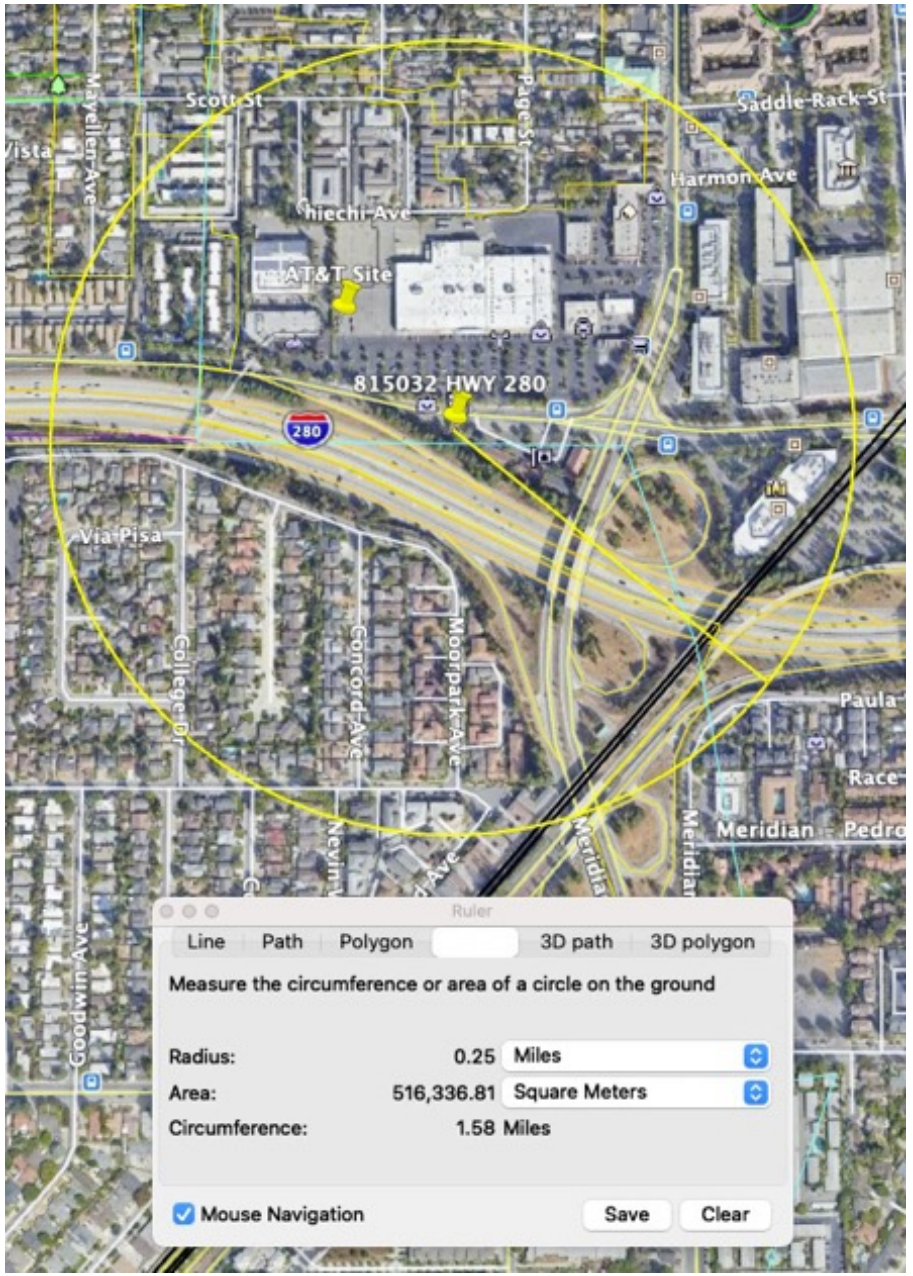


815032

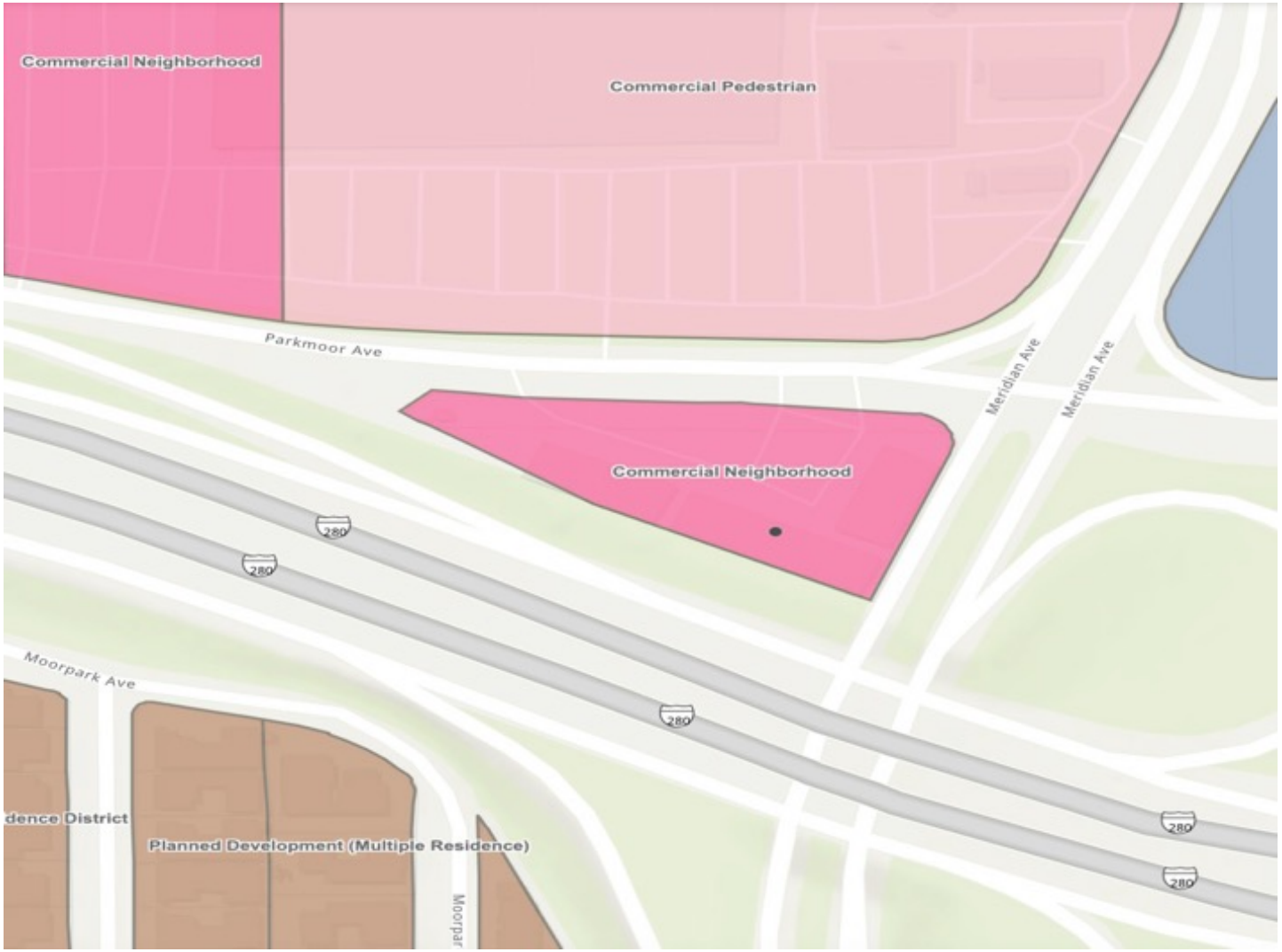
¼ MILE RADIUS

EXISTING SITE:

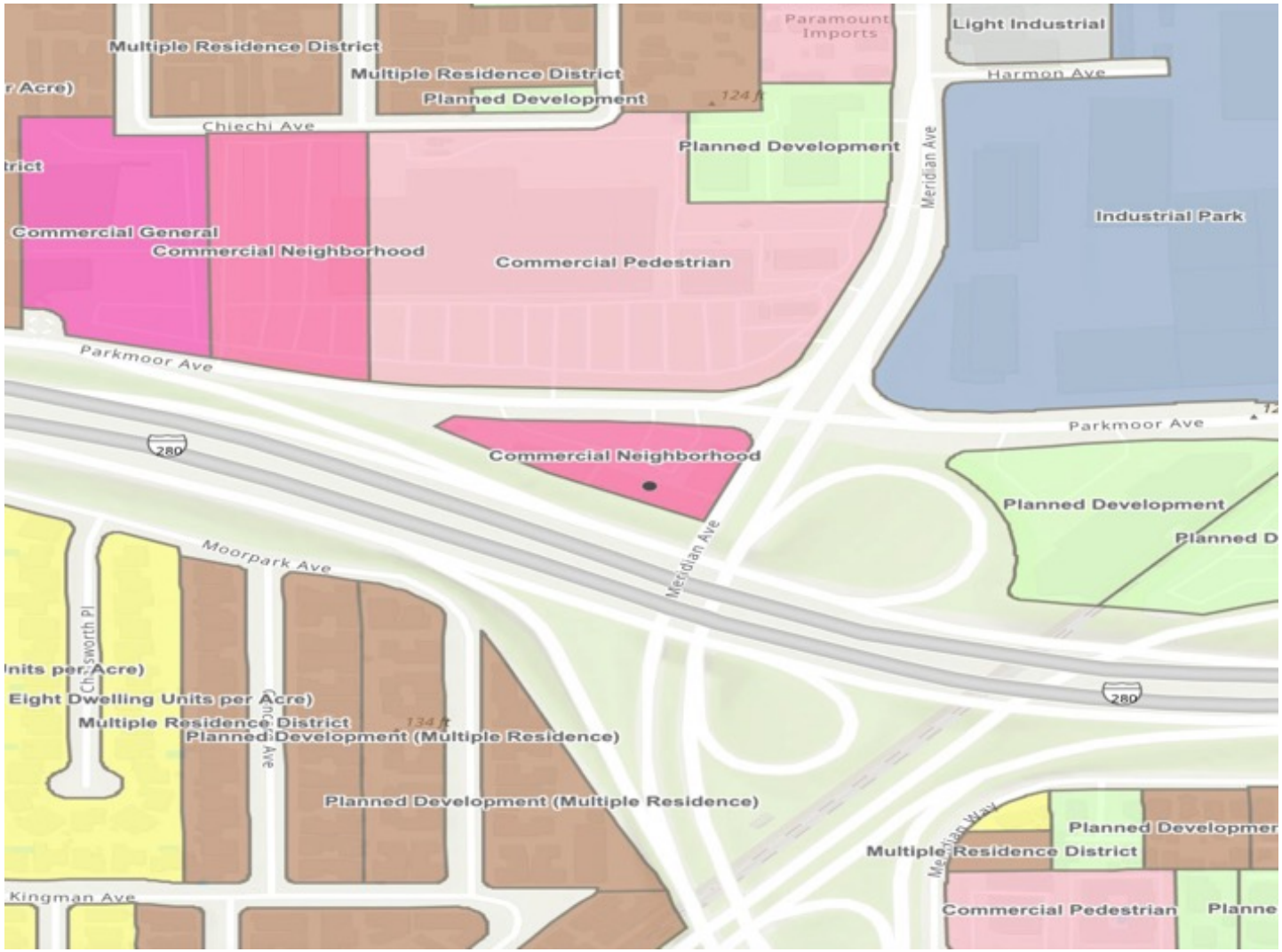
The existing WCF is located, in the Commercial Neighborhood zone and the site encompasses a 45-foot stealth monopole with associated equipment placed in the compound at the base of the tower. Below is a map showing the site location and a quarter mile circle around the site. We're also showing the AT&T site to the northwest. There are 2 zoning maps showing a close-up and a zoomed-out version. Lastly, the Antenna Search Registration findings showing the Crown and AT&T towers are on the last page.



Zoning Map – Close Up



Zoning Map – Zoomed Out



Zoning Consistency

The subject site is zoned: **CN Commercial Neighborhood Zoning District**.

Development Standards

Parking: One vehicle and one bicycle space per site

Label the space that is dedicated for the antenna. Of the 79 existing parking spaces, how many are used to meet the parking for the existing buildings? The plan set should show that the parking space for the wireless use would not result in deficit of required parking spaces than required for all uses in the plaza. Also, please identify the bicycle parking space. Could the bicycleparking space be located within the enclosure?

See Page A-2.1 of Zoning Drawings noting dedicated parking space for periodic maintenance of the wireless facility as the facility is an unmanned facility. A bicycle parking locker was added within the enclosure on Page A-2.1.

ASR Registration Search

Registration Search Results

Displayed Results

PA = Pending Application(s)

Specified Search

Latitude='**37-18-59.6 N**', Longitude='**121-54-59 W**', Radius=**0.4 Kilometers**

	Registration Number	Status	File Number	Owner Name	Latitude/Longitude	Structure City/State	Overall Height Above Ground (AGL)
1	1013335	Constructed	A1013302	Crown Castle GT Company LLC	37-18-59.5N 121-54-58.8W	SAN JOSE, CA	14.0
2	1287141	Constructed	A1149589	AT&T Mobility Spectrum LLC	37-19-03.2N 121-55-03.5W	San Jose, CA	20.1

CONCLUSION

The existing site was selected based on its location within the coverage objective area, the landlord willingness to lease the site, the ability to stealth the facility, and consideration of the zoning classifications. Other potential site candidates were disqualified due to lack of 1) space and other environmental constraints; 2) a viable existing structure with collocation opportunity; and/or 3) a viable location and/or height that will meet required coverage objectives. For those reasons, we respectfully request the current site remain in place and an additional 10-year CUP be granted.

City Council Policy 6-20

Land Use Policy for Wireless Communication Facilities

Alternative Sites Analysis

City Council Policy 6-20: Land Use Policy for Wireless Communication Facilities

Alternatives Analysis: In siting new wireless antennas, service providers should explore alternatives to new monopoles that reduce visual impacts. New antenna installations by definition include height additions to existing monopoles and the issuance of a new permit for an existing antenna with a passed permit, as well as entirely new installations. An alternatives analysis should be prepared for any proposed antenna installation that does not make use of a building-mounted or structure-mounted antenna design architecturally integrated with the supporting building or structure. The alternatives analysis should identify all technically feasible potential location sites which reasonably meet the service provider's radio frequency coverage objectives, particularly building-mounted sites, within the project vicinity, provide analysis as to the feasibility of those alternatives and compare the level of visual impact with that of the proposed project. At a minimum, this analysis should identify the location of all existing monopoles within a quarter mile of the proposed site; provide an explanation of why collocation has not been proposed at each of these sites; and assess the potential for building-mounted alternatives.

SEARCH AREA: To meet the coverage objective for the Interstate 280 and Meridian Ave. area, properties within the search area and immediate surrounding area were considered and evaluated for the existing facility. The search area is comprised of mostly residential uses surrounding the subject property with a small commercial area just north of I280 where a grocery store and small shopping complex is located. Our communication facility is located, in a small commercial complex just south of the grocery store and adjacent to I280. There are no residential uses adjacent to our site. Our communication facility is strategically located next to I280 and commercial areas as far from residential uses as possible. Please see the zoning maps below. There are no other locations in the coverage area that offer this level of natural and man-made screening.

1. Permit Expirations: Changing development patterns in the area (e.g., a prevailing change from commercial or industrial to residential uses on surrounding properties OR the development of taller buildings or structures in the near vicinity that provide superior collocation opportunities), rapidly changing technologies and/or the availability of improved technologies, may prompt the City upon such review to determine that opportunities have become available to replace the existing antenna with a new antenna that has improved visual and land use characteristics. This application requires review of improvement opportunities for the existing antenna. Please provide an alternatives analysis that what advancements in technology are available since the last Conditional Use Permit. Would any advancements in technology be incorporated into the project?

This existing tower is a stealth monopole with flush mounted antennas. Over the years as technology has changed Crown Castle and their tenants have worked to minimize the visual impact as much as possible. All the existing equipment is flush mounted in order to be as close to the pole as possible and the pole and the antennas are proposed to be re-painted a muted green-brown to help camouflage it within the existing trees. The existing ground equipment and base of the tower are completely shielded from public view behind a wooden fence. Crown Castle, Verizon, and Metro PCS have kept this wireless

facility as technologically advanced as each carrier can support. The existing antennas and equipment have been completely swapped since the last CUP was approved. Please see projects 2016-114166-000-CI and 2015-029531-000-CO as proof of those upgrades. Although technology allows efficiencies that decrease the size of antennas and associated equipment, the massive increase in capacity demands due to video streaming and other high bandwidth uses by customers require even larger antennas in many cases. While our antenna and equipment size needs may be the same as 10 years ago, the amount of bandwidth provided by the current equipment is exponentially higher. Verizon and Metro PCS are always utilizing technological advances in fiber optics, radio frequency transmission, power delivery, and smart antennas.

2. Criteria for Siting Wireless Communication Antennas - Visual Impact (Alternative Analysis): An alternatives analysis should be prepared for any proposed antenna installation that does not make use of a building-mounted or structure-mounted antenna design architecturally integrated with the supporting building or structure. The alternatives analysis should identify all technically feasible potential location sites which reasonably meet the service provider's radio frequency coverage objectives, particularly building-mounted sites, within the project vicinity, provide analysis as to the feasibility of those alternatives and compare the level of visual impact with that of the proposed project. At a minimum, this analysis should identify the location of all existing monopoles within a quarter mile of the proposed site; provide an explanation of why collocation has not been proposed at each of these sites; and assess the potential for building mounted alternatives. Provide examples of possible building-mounted sites within a quarter of a mile and explain why the site would or would not work. Which sites where explored?

The rooftops in the immediate area are not high enough to host wireless communication facilities. They are at most, 25' high. The Food Maxx building just north is a low rooftop building as well as the commercial buildings on our property and adjacent to our site. Our current antennas have a tip height of 46'-1" and we need at least that height at any other location in the area. Some higher rooftops located are in the Industrial Park approximately 900' northeast. However, these buildings are too far from Interstate 280 and too east for Verizon's search area center. Verizon needs to be located adjacent to I-280 and farther south than the Industrial Park would allow. Also, Crown Castle is an infrastructure provider and builds wireless facilities for wireless carriers to locate and then leases space on our infrastructure to wireless providers. Crown would likely not be involved with a rooftop wireless site in a business park due to how our business model works. There is also an existing AT&T slim line monopole located in the Food Maxx parking lot approximately 500' northwest of our existing site. However, there is no existing space left on the monopole for Verizon or Metro PCS antennas. The tower would likely need to be replaced with a much taller monopole to accommodate Verizon and Metro PCS. That would cause the tower to be more visible and would lose the current stealth benefits. The AT&T tower is much less screened and visible to the public than our monopole. Our site is located next to the Interstate and away from areas where the public frequently visits. It would make more sense to consolidate wireless carriers on our site rather than Verizon and Metro PCS moving to the AT&T tower. Consolidating all the carriers onto one pole would force a much taller, wider (for structural reasons) tower, making stealthing and screening much more difficult than having the current 2 towers. The overall stealthing is better served by having two separate stealth towers than one large tower.

Freestanding Monopoles: A photo survey was provided; this comment was not addressed in the response letter. The antenna is surrounded by trees and the monopole should be designed to minimize visibility. Considering camouflaging the monopole as a tree to address the requirement.

The existing tower is “slim” in profile and is nestled inside a grove of existing trees. Please note the tower is designed with the antennas and equipment placed flush against the pole, which is a stealth design. The antennas are as flush as possible while still allowing Verizon the proper sized antennas and equipment to provide coverage and capacity to customers. We have proposed to re-paint the tower and the antennas a muted green/brown to blend in with the existing trees screening the site. As a result, the existing tower will be well camouflaged and will not be easily seen from public view. The drawings and photos have been improved to demonstrate relationship between the existing trees and the existing tower.

The picture provided in your comments letter dated April 16, 2020 (above) depicts a standalone monopine tucked between 2 streets without any nearby landscaping to screen the site. The site depicted would look more natural if landscaping were to be installed. In comparison, the existing subject site has natural screening with tall trees adjacent to stealth the tower. Furthermore, the increase the bulk and scale of the existing tower may not be structurally feasible. Also, we would need to add another 10’ to 15’ of height to have proper tapering of the monopine and result in more visible structure. The overall tower would be much wider, taller, and will likely be outside of compound area. This would also result in more visible structure. If we make sure all elements of the tower and equipment are painted properly, the current design blends into the environment better than a faux tree design.

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Photosims

Existing and Proposed Paint Scheme and additional Live Tree to provide enhanced stealthing

Existing Site Photo – Looking Southwest from Parkmoor Avenue

Proposed Site Photo – Looking Southwest from Parkmoor Avenue

Existing Site Photo – Looking South from Parkmoor Avenue

Proposed Site Photo – Looking South from Parkmoor Avenue